

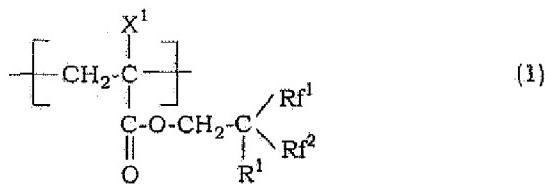
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1.-31. (canceled).

32. (new): A fluorine-containing optical material which comprises a fluorine-containing copolymer comprising from 32 to 36 % by mole of a structural unit (a) represented by the formula (1):



wherein X¹ is CH₃ or F; Rf¹ and Rf² are CF₃; R¹ is CH₃, and from 64 to 68 % by mole of a structural unit (b) derived from methyl methacrylate.

33. (new): The fluorine-containing optical material of Claim 32, which has a glass transition temperature of not less than 100°C, a refractive index of not more than 1.440 and a fluorine content of not less than 20 % by weight.

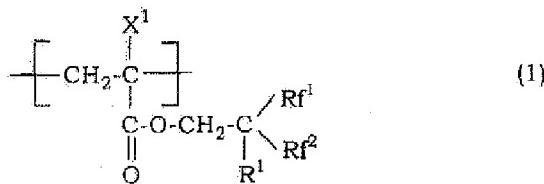
34. (new): The fluorine-containing optical material of Claim 32, wherein the glass transition temperature is not less than 105°C.

35. (new): The fluorine-containing optical material of Claim 32, wherein the refractive index is not more than 1.430.

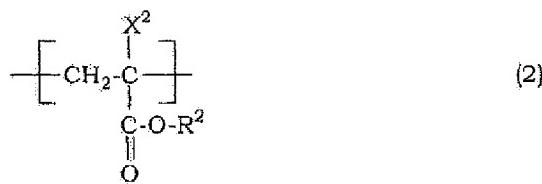
36. (new): The fluorine-containing optical material of Claim 32, wherein the fluorine content is not less than 30 % by weight.

37. (new): A material for clad of optical fiber which is obtained from the fluorine-containing optical material of Claim 32.

38. (new): A fluorine-containing optical material which comprises a fluorine-containing copolymer comprising from 15 to 62 % by mole of a structural unit (a) represented by the formula (1):



wherein X¹ is CH₃ or F; Rf¹ and Rf² are CF₃; R¹ is CH₃, from 12 to 70 % by mole of a structural unit (b) derived from methyl methacrylate and from 1 to 40 % by mole of a structural unit (c1) (excluding the structural unit (a)) represented by the formula (2):

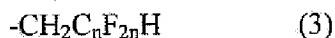


wherein X² is H, CH₃, F, CF₃ or Cl; R² is a fluoroalkyl group having 4 to 6 carbon atoms.

39. (new): The fluorine-containing optical material of Claim 38, wherein the fluorine-containing copolymer comprises from 23 to 50 % by mole of the structural unit (a),

from 33 to 70 % by mole of the structural unit (b) and from 1 to 40 % by mole of the structural unit (c1).

40. (new): The fluorine-containing optical material of Claim 38, wherein in the fluorine-containing copolymer, R² in the formula (2) representing the structural unit (c1) is represented by the formula (3):



wherein n is an integer of from 3 to 5.

41. (new): the fluorine-containing optical material of Claim 40, wherein in the fluorine-containing copolymer, R² in the formula (2) representing the structural unit (c1) is -CH₂C₄F₈H.

42. (new): The fluorine-containing optical material of Claim 38, wherein in the fluorine-containing copolymer, X² in the formula (2) representing the structural unit (c1) is -CH₃.

43. (new): The fluorine-containing optical material of Claim 38, which has a glass transition temperature of not less than 100°C, a refractive index of not more than 1.440 and a fluorine content of not less than 20% by weight.

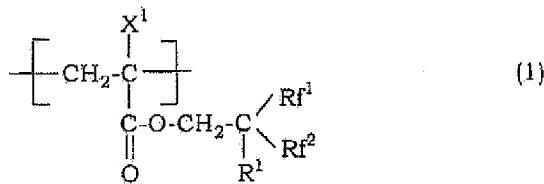
44. (new): The fluorine-containing optical material of Claim 38, wherein the glass transition temperature is note less than 105°C.

45. (new): The fluorine-containing optical material of Claim 38, wherein the refractive index is not more than 1.430.

46. (new): The fluorine-containing optical material of Claim 38, wherein the fluorine content is note less than 30% by weight.

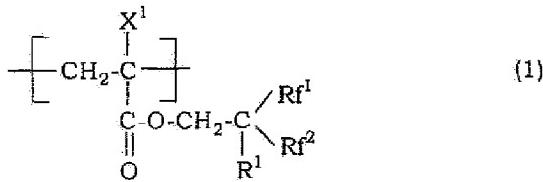
47. (new): A material for clad of optical fiber which is obtained from the fluorine-containing optical material of Claim 38.

48. (new): A fluorine-containing copolymer which has a weight average molecular weight of from 10,000 to 1,000,000 and comprises from 32 to 36 % by mole of a structural unit (a) represented by the formula (1):

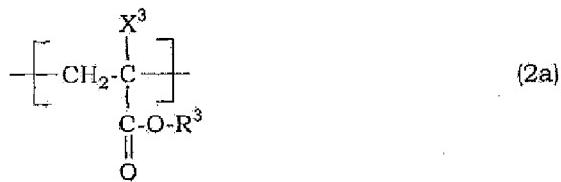


wherein X¹ is CH₃ or F; Rf¹ and Rf² are CF₃; R¹ is CH₃, and from 64 to 68 % by mole of a structural unit (b) derived from methyl methacrylate.

49. (new): A fluorine-containing copolymer which has a weight average molecular weight of from 10,000 to 1,000,000 and comprises from 15 to 62 % by mole of a structural unit (a) represented by the formula (1):



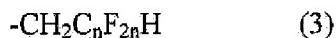
wherein X¹ is CH₃ or F; Rf¹ and Rf² are CF₃; R¹ is CH₃, from 12 to 70 % by mole of a structural unit (b) derived from methyl methacrylate and from 1 to 40 % by mole of a structural unit (c2) represented by the formula (2a):



wherein X^3 is H, CH_3 , F, CF_3 or Cl; R^3 is a fluoroalkyl group having 4 to 6 carbon atoms; the structural unit represented by the formula (1) is excluded.

50. (new): The fluorine-containing copolymer of Claim 49, which comprises from 23 to 50 % by mole of the structural unit (a), from 33 to 70 % by mole of the structural unit (b) and from 1 to 40 % by mole of the structural unit (c2).

51. (new): The fluorine-containing copolymer of Claim 49, wherein R^3 in the formula (2a) representing the structural unit (c2) is represented by the formula (3):



wherein n is an integer of from 3 to 5.

52. (new): The fluorine-containing copolymer of Claim 51, wherein R^3 in the formula (2a) representing the structural unit (c2) is $-CH_2C_4F_8H$.

53. (new): The fluorine-containing optical material of Claim 49, wherein in the fluorine-containing copolymer, X^2 in the formula (2a) representing the structural unit (c2) is $-CH_3$.